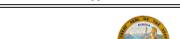
### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015728 Address: 333 Burma Road **Date Inspected:** 18-Jul-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

Mr. Gao Zhi Chun **CWI Name: CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

#### **BAY 11**

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as East Tower lift 4 Skin A Man hole Drip plate. The weld designations reviewed are as follows.

ESD1-FASA4-2A/E-35. ESD1-FASA4-2C/E-12

NDT Notification No-06223

This QA Inspector observed the following work in progress:

#### BAY 11: SMAW Process.

This QA Inspector observed ZPMC qualified welding personnel identified as 040667, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-20-1B. ZPMC QC Identified as Liu Dao Feng, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

# WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 040614, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as ESD1-SPSA5-12-4B. ZPMC QC Identified as Liu Dao Feng, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040656, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-7-1B. ZPMC QC Identified as Liu Dao Feng, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 046704, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-12-4B. ZPMC QC Identified as Liu Dao Feng, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

#### BAY 11 Magnetic Particle Testing:

This QA Inspector observed ZPMC Magnetic Particle Testing Inspector performed MT on Tower Strut. Tower Strut identified as ND1-STSA4-6-143M-2. For more information see below attached picture number 1.

## SMAW Process Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 040614, Perform Shielded Metal Arc Welding (SMAW) on Tower Strut, Joint identified as SD1-STSA4-5-127M-1-6B. ZPMC CWI Identified as Yu Dong Ping with temporary welding repair report. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F) FCM-Repair-1. For more information see below attached picture number 2.

#### BAY 11 OBG Lift 13, SAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 047304, Perform Submerged Arc Welding (SAW) on Bike Path of OBG lift 13. Joint identified as BK004A1-001-009, ZPMC QC Identified as Lui Dao Feng. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2. For more information see below attached picture number 3.

## BAY 10,

#### **SMAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 040581, Perform Shielded Metal Arc Welding (SMAW) on South Tower lift 5 Grillage plate of skin A, Joint identified as SSD1-TL5-1B-F-7B. ZPMC QC Identified as Li Peng Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U5b.

This QA Inspector observed ZPMC qualified welding personnel identified as 056200, 500363, Perform Shielded Metal Arc Welding (SMAW) on South Tower lift 5 Grillage plate of skin A, Joint identified as SSD1-TL5-1B-F-4A, 4B. ZPMC QC Identified as Li Peng Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U5b.

# WELDING INSPECTION REPORT

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#### BAY 10 OBG Lift 13, FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052075, Perform Flux Core Arc Welding (FCAW) on Side plate of OBG lift 13. Joint identified as SP3113-001-116, 117, ZPMC QC Identified as Yuan Hai Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 053869, Perform Flux Core Arc Welding (FCAW) on Side plate of OBG lift 13. Joint identified as SP3113-001-118, ZPMC QC Identified as Yuan Hai Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2232-Tc-U5b-F.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.







## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

# WELDING INSPECTION REPORT

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remedial efforts please contact Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer